LIFE HISTORIES OF NORTH AMERICAN GEOMETRIDAE. —XXXI.

BY HARRISON G. DYAR, WASHINGTON, D. C.

Orthofidonia vestaliata Guen.

Egg. Elliptical, strongly flattened concave, one end considerably depressed, the other rounded bluntly, scarcely truncate. Pale yellow, shining; perfectly smooth, no sculpturing. Size $.7 \times .5 \times .3$ mm. Turned partly red before hatching.

Stage I. Head rounded, shining yellowish luteous, ocelli black. Body cylindrical normal, moderate, entirely smooth; pale yellow, not shining; shields undifferentiated, unmarked; feet moderate, normal. Later became all shining pale green, translucent, the food showing green in spots.

Stage II. Head rounded, yellowish luteous as before; width, .4 mm. Body the same shining translucent yellowish, the food green, irregularly spotted. Tubercles minute, dark, setae short. Segments slightly annulate.

Stage III. Head rounded, slightly bilobed, obliquely erect, clypeus high; pale yellow, not shining, mouth brown, eye black; width, .6 mm. Body normal, moderate, shining translucent pale green, appearing hright green from the food, immaculate. Tracheal line fine, white. Tubercles dark but very small. Setae small, black, pointed. Thorax and joints 10–13 slightly wrinkled annulate, 5 to 9 a little drawn out and smooth.

Stage IV. Head round, flattish before,

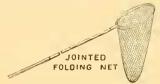
rather wide, clypeus sunken; green, not shining; width, 1.05 mm. Body moderate, normal, green, the incisures narrowly folded whitish, tracheal line white; setae short, rather stiff, dark, from invisible tubercles. The larva is translucent, not transparent; no marks.

Stage I. Head round, flat before, nearly erect; green, a line of brown dots starts at the base of the clypeus and runs up to vertex of lobe then curves inward and downward shortly; ocelli black, mouth brown; width, 1.6 mm. Body moderate, uniform, not tapering, cylindrical, normal; segments weakly 6-annulate. Smooth, rather shining translucent green, a whitish dorsal and a subdorsal line shaded between them and below with darker green; feet green; anal plate rounded, equalling the weakly shielded anal feet; shields membranous. Subventral fold rather brightly shaded in a faint paler tint. Dorsal stripe fainter and broader than the subdorsal one. Pupation in the ground.

Food plant. The larvae were fed on wild cherry.

Moths common early in June in the more densely wooded gulches in the lower foot hills of the Rocky Monntains near Denver, Colorado. Eggs June 7th, mature larvae, July 1st. Apparently single brooded.

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